ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
FEBRUARY 5, 2004 – 9:00 A.M.
AERONAUTICS COMMISSION ROOM

Present:	L. E. Tibbits	J. Polasek	B. J. O'Brien
	C. Roberts	J. D. Culp	R. Safford
	J. W. Reincke	T. Fudaly	C. Bleech
Absent:	J. Friend	M. VanPortFleet	
Guests:	B. Lower	W. Stebbins	K. Kennedy
	D. Weber	B. Peña	L. Burchell

OLD BUSINESS

1. **Approval of the Minutes of the January 8, 2004, Meeting – L. E. Tibbits**

The minutes of the January 8, 2004, meeting were approved.

2. **Pavement Selection, I-69 Reconstruction: CS 13073/13074, JN 60522 – D. Weber**

See January 8, 2004, meeting minutes, New Business, Item 2. This item was withdrawn and sent to EOC by email for review and approval.

The reconstruction alternatives considered were a HMA pavement (Alternate 1 – Equivalent Uniform Annual Cost [EUAC] $40,117/directional mile) and a jointed plain concrete pavement (Alternate 2 – EUAC $36,245/directional mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

11.5" ..... Jointed Plain Concrete Pavement (15' joint spacing)
4" ..... Open Graded Drainage Course (Mainline)
10" ..... Open Graded Drainage Course (3' of Outside Shoulder & Entire Inside Shoulder)
Geotextile Separator
12" ..... Existing Base/Subbase
5.5" ..... HMA 4C & 3C (Freeway Shoulder Option)
Underdrain System
27.5" ..... Total Thickness

Present Value Initial Construction ..... $536,170/directional mile
Present Value Initial User Costs ..... $24,113/directional mile
Present Value Maintenance Costs ..... $72,994/directional mile

NEW BUSINESS

1. **Pavement Selections – D. Weber**

A. I-94 Reconstruction: CS 82022, JN 45684/55848

The reconstruction alternates considered were a HMA pavement (Alternate 1 – EUAC $203,439/direction mile) and a jointed plain concrete pavement (Alternate 2 – EUAC $150,633/directional mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

12.5" (317.5mm)..... Plain Concrete Pavement 16' jt. spacing (Mainline)
11.25" (285.8mm)..... Plain Concrete Pavement 16' jt. spacing (Outside and Inside Shoulder)
16" (406.4mm)..... Open Graded Drainage Course (Mainline)
17.25" (438.2mm)..... Open Graded Drainage Course (Outside and Inside Shoulder)
Geotextile Separator
6" (152.4mm)..... Open Graded Underdrains
28.5" (723.9mm)..... Total Thickness

Present Value Initial Construction Costs ..... $1,382,289/directional mile
Present Value Initial User Costs ..... $1,138,938/directional mile
Present Value Maintenance Costs..... $110,677/directional mile
Equivalent Uniform Annual Cost ..... $150,633/directional mile

B. I-96 Reconstruction: CS 82124, JN 48608

The reconstruction alternates considered were a HMA pavement (Alternate 1 – EUAC $206,087/directional mile) and a jointed plain concrete pavement (Alternate 2 – EUAC $163,049/directional mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

11" (279.4mm)..... Jointed Plain Concrete Pavement 15' jt (Mainline)
10" (254mm)..... Jointed Plain Concrete Pavement 15' jt (Inside and Outside Shoulder)
16" (406.4mm)..... Open Graded Drainage Course (Mainline)
17" (431.4mm)..... Open Graded Drainage Course (Inside and Outside Shoulder)
Geotextile Separator
6" (152.4mm)..... Open Graded Underdrains
27" (685.8mm)..... Total Thickness

Present Value Initial Construction Costs ..... $1,510,489/directional mile
Present Value Initial User Costs ..... $1,153,891/directional mile

Present Value Maintenance Costs..... $184,461/directional mile
Equivalent Uniform Annual Costs..... $163,049/directional mile

2. **Paver Placed Surface Seal (Nova Chip) – C. Bleech and K. Kennedy**

Paver Placed Surface Seal is an emerging technology and is not a standard fix in the Pavement Sealing category for Capital Preventive Maintenance (CPM). There has been a pilot program to evaluate this technology since 2000. Several projects were evaluated by pavement management staff in four regions. An extensive report was written and reviewed by the Pavement Committee, and they recommend moving this surface seal out of the Emerging Technologies category into the Pavement Sealing category as a standard fix in the CPM Program.

ACTION: EOC approves the recommendation and notes that guidelines will be developed by the Pavement Committee.

3. **Approval of New Temporary Concrete Barrier Special Provision – B. Lower**

After considerable discussion, it was decided to table this item until the March meeting when it will be returned with a proposed crash testing plan, timeframe, and cost proposal for evaluating our existing temporary concrete barrier design.

(Signed Copy on File at C&T)
Jon W. Reincke, Secretary
Engineering Operations Committee

JWR:kar

cc:
G. J. Jeff
K. Steudle
L. Hank
EOC Members
Region Engineers
TSC Managers
Assoc. Region Engineers
T. Kratofil
M. DeLong
B. Kohrman
J. Shinn
S. Mortel
D. Jackson
W. Tansil
D. Wresinski
R. D. Till
D. A. Juntunen
J. Ruszkowski
C. Libiran
R. J. Lippert, Jr.
T. L. Nelson
T. Phillips
K. Peters
J. Ingle
J. Steele (FHWA)
A. C. Milo (MRBA)
G. Bukoski (MRBA)
R. J. Risser, Jr. (MCPA)
D. Hollingsworth (MCA)
J. Becsey (MAPA)
M. Newman (MAA)
M. Nystrom (AUC)
J. Murner (MRPA)
R. Brenke (ACEC)